MCO formulary managers for a migraine treatment that has a good chance of relieving pain within 15 minutes, allowing quick return to normal activities. We also found that patients and physicians are willing to pay much more than MCO formulary managers for other quality-of-life benefits, including preferred dosage form, nausea relief and avoiding drowsiness.
CONCLUSIONS: The results support our hypothesis that physicians and patients value quality-of-life benefits more highly than MCO formulary managers. However, the sample sizes involved are too small to permit strong inference.

PNP6

WHAT IS IMPACT OF INSOMNIA ON MEDICAL DISORDERS, QUALITY OF LIFE AND ABSENTEEISM? A STUDY IN A FRENCH WORKING POPULATION

Jasso Mosqueda JG[1], Philip P[2], Leger D[3], Maria Antonieta QS[4], Taillard J[2], Niedhammer I[5], Bioulac B[2], Gerard D[6], Chicoye A[1]
[1]Annie Chicoye Economics, Neuilly/Seine France; [2]Clinique du Sommeil, Chu Bordeaux, Bordeaux, France; [3]Centre de Sommeil Hôtel Dieu de Paris, Paris, France; [4]Laboratoire du sommeil, Chu Paris-Ouest, Garches, France; [5]Inserm U 88 Hnsm, Saint Maurice, France; [6]Sanofi-Synthélabo, Meudon la Foret, France

Despite insomnia induces a great number of medical and psychiatric visits, the role of co-morbidity in the medical and professional consequences of this sleep disorder is poorly documented.
OBJECTIVES: Our study seeks to evaluate the impact of insomnia on the health status and absenteeism; and to identify the part of co-morbidity in the severity of insomnia.
METHODS: We used data from the Gazel cohort (a cohort of employees of the French electrical and gas company) providing medical, professional and demographic information; the Epworth sleepiness scale; the Nottingham Health Profile; the Basic Nordic Sleep Questionnaire and a 3-week sleep log. Firstly, we compared a group of insomniacs (n = 986) with another one free of sleep complaints (n = 584). Secondly, all subjects suffering from mood and organic sleep complaints (snoring and nocturnal periodic leg movements) were excluded.
RESULTS: In the non-adjusted by mood and organic sleep complaints comparison (n = 986) we found a higher absenteeism than in insomniac group than in control (9.6 +/– 31 days versus 5.8 +/– 19 days, U Mann-Withney, $p < 0.01$). However, no differences (6.39 vs. 6.02 days, U Mann-Withney, p = NS) in absenteeism between the control group and insomniacs free of depression or organic sleep complaints were observed. Nevertheless, insomniacs (complaining or not of mood or organic sleep complaints) showed a poorer health status defined by the Nottingham Health Profile than control subjects.
CONCLUSIONS: Insomniac complaints are strongly associated with an alteration of quality of life. Absenteeism in insomniacs is related to associated mood disorders or organic sleep complaints.

NEUROLOGICAL/PAIN DISORDERS—*Health Policy Presentations*

PNP7

THE MIGRAINE IN FRANCE IN 2000

Henry P[1], Auray JP[2], Duru G[2], Chazot G[3], Dartigues JF[4], Lanteri-Minet M[5], Lucas C[6], Pradalier A[7], El Hasnaoui A[8], Gaudin AF[8]
[1]Hopital Pellegrin, Bordeaux, France; [2]Université Claude Bernard, Lyon, France; [3]Hopital Cardio Vasculaire et Neurologique, Bron, France; [4]Université Bordeaux II, Bordeaux, France; [5]CHU de Nice, Nice, France; [6]Hospital Roger Salengro, Lille, France; [7]Hopital Louis Mourier, Colombes, France; [8]Laboratoire Glaxo Wellcome, Marly le Roi, France

OBJECTIVE: A French national epidemiological study on migraine was presented 10 years ago at the Migraine trust. It was the first study to cover an entire country (HENRY P. et al.: Migraine prevalence in France. In New advances in headache research: 2. Ed. Clifford Rose 1991 Smith Gordon-pp.: 11–14). This study has provided also data on the burden of migraine in terms of its economic and social impact. We would like today to update the data.
METHODS: 1486 persons, aged over 15 and suffering from headaches were randomly selected from a large representative sample of the French population. They were asked to complete a questionnaire, which allowed discriminating sufferers of migraine according to IHS criteria.
RESULTS: Among the 1486 headache sufferers, we find 880 migrainous people (1-1, 1-2 and 1-7 IHS criteria), 454 without migrainous headache and 152 with chronic daily headache. If we compare the results of the certain migraine group (1-1 and 1-2 IHS) we find that they are identical (8.1% (1989) versus 8.2% (1999)). However, if we include the migrainous disorder group fulfilling all criteria but one (1-7 IHS), the prevalence rate for migraine headache in France between 1989 and 1999 seems to show a clear increase, rising from 12.1% to 17.3% because of less restrictive criteria than those applied ten years ago. Regarding the prevalence in general population for chronic daily headache the rate is around 3% with 1.8% for men and 3.9% for women in 1999.

PNP8

MULTIPLE SCLEROSIS: COMPLIANCE TO COPAXONE® THERAPY

Marks AS, Johnson KE
Caremark, Inc, Northbrook, IL, USA

OBJECTIVES: To identify through retrospective analysis the difference in Glatiramer Acetate (Copaxone®) therapy compliance between participants associated with

Caremark pharmacy delivery and other pharmacies for an MS population.
METHODS: Participants in Caremark's pharmacy claims database were retrospectively analyzed for compliance on Glatiramer Acetate therapy. We compared two pharmacy delivery systems on therapy compliance, episode duration and cost by delivery episode. Compliance was defined as the total days supplied over the total calendar days elapsed. Episodes were defined as continuous time periods where prescription and pharmacy delivery system remained constant. Pharmacy was categorized as Caremark (CMX) or Non-Caremark (OTH). Descriptive information on available MS related medical claim data was compiled. Compliance and cost differences between pharmacies were calculated and tested for statistical significance using a chi-square test. The study period encompassed 08/1998 through 12/2000.
RESULTS: 1516 participants (74.8% female, mean age 44.3 +/– 10.2 years) received Glatiramer Acetate prescriptions from August 1998 through December 2000. 1706 delivery episodes were identified (CMX 74%, OTH 26%). Compliance to Glatiramer Acetate therapy was 93.2% (se 0.008) for Caremark episodes, and 84.2% (se 0.014) for OTH ($p < 0.0001$). The duration of drug therapy regiment was longer (427.1 days, se 8.454) for CMX episodes Vs OTH (384.6 days, se 16.591, $p = 0.0142$). Observation of the total health care costs per participant ($N = 39$) was $22,523 for CMX, and $81,707 for OTH.
CONCLUSION: Caremark specialty pharmacy services were associated with higher compliance rates and longer length of continuous therapy than alternate pharmacy distribution channels. Though the cost of higher rates of compliance also increases the pharmacy spend, the total healthcare costs may be reduced by the maintenance of increased compliance.

PNP9

TRIPTAN UTILIZATION PATTERNS IN A MANAGED CARE POPULATION

Etemad LR[1], Yu W[2], Johnson KA[1]
[1]University of Southern California, Los Angeles, CA, USA; [2]WellPoint Pharmacy Management, West Hills, CA, USA

OBJECTIVES: To assess utilization characteristics of triptan medications (sumatriptan, naratriptan, zolmitriptan and rizatriptan) and evaluate the need for migraine quality improvement programs in a managed care population.
METHODS: Utilizing a pharmacy claim database from a managed care healthplan (over 1.9 million members), patients who have at least one triptan claim during July 1, 1998–May 31, 2001 were identified. Patients were included if continuously enrolled for 12 months following the first triptan prescription and did not have a triptan claim during the previous six months. Patients receiving two or more different triptans within a 3-day period were considered concurrent triptan users. In order to standardize the quantity of triptan medication consumed per patient across the different triptans, "headache equivalents" (HE) were calculated for each medication by dividing the quantity consumed by the maximum quantity recommended for one headache. The number of patients exceeding the recommended maximum consumption of 3 HE per month (36 HE per year) was determined.
RESULTS: A total of 5,294 new triptan users were identified. Of these, 39% received only one triptan prescription during the follow-up period, accounting for 11% of the total triptan drug costs. Fifteen percent of the patients required more than one unique triptan medication and 4% concurrently used two or more triptans during the study period. Eight percent exceeded the recommended maximum consumption of 36 HE per year and were responsible for 39% of the total triptan expenditures.
CONCLUSIONS: A notable number of patients received only one triptan prescription. A small percentage of patients received quantities exceeding recommendations and accounted for a large portion of the triptan pharmacy costs. Migraine quality improvement programs in these subsets of patients may be valuable.

PNP10

THE STATE OF ANTI-EPILEPTIC DRUG PRESCRIBING: RESEARCH AND PRACTICE

Pugh MJ[1], Knoefel J[2], Mandell A[3], Charbonneau A[1], Berlowitz D[1]
[1]Center for Health Quality, Outcomes and Economic Research, VA, Bedford, MA, USA; [2]VA New Mexico, Albuquerque, NM, USA; [3]ENRM VAMC, Bedford, MA, USA

OBJECTIVES: VA (Veteran's Health Administration) Cooperative studies convincingly demonstrate that despite equal efficacy, phenobarbital and phenytoin are more likely to cause adverse effects, and an expert panel recommended carbamazepine as the drug of choice for adult-onset seizures, with newer medications (lamotrigine, gabapentin) being preferable for treating elderly epileptics. This study examines the state of AED use in the VA during 1999.
METHODS: We linked administrative (FY1997-FY1999) and pharmacy databases to identify veterans with epilepsy who were on anti-epileptic drugs (AEDs, N = 63,853). We used logistic regression to determine if age (>65 vs. <65) or type of care (primary care or primary care and neurology) predicted use of: phenobarbital, phenytoin, carbamazepine, and gabapentin. We controlled for demographics, year diagnosed (1997 or before, 1998, 1999), seizure type (partial, generalized, both), and number of epilepsy hospitalizations or emergency visits (severity).
RESULTS: In 1999 patients were on: phenytoin 59%, phenobarbital 10%, carbamazepine 20%, gabapentin 12%, lamotrigine 2%. Logistic regression indicated that when year diagnosed, sex, race, and severity were controlled, veterans under 65 were less likely to receive phenobarbital (OR .52–.56) and phenytoin (OR .46–.49), and more likely to receive carbamazepine (OR